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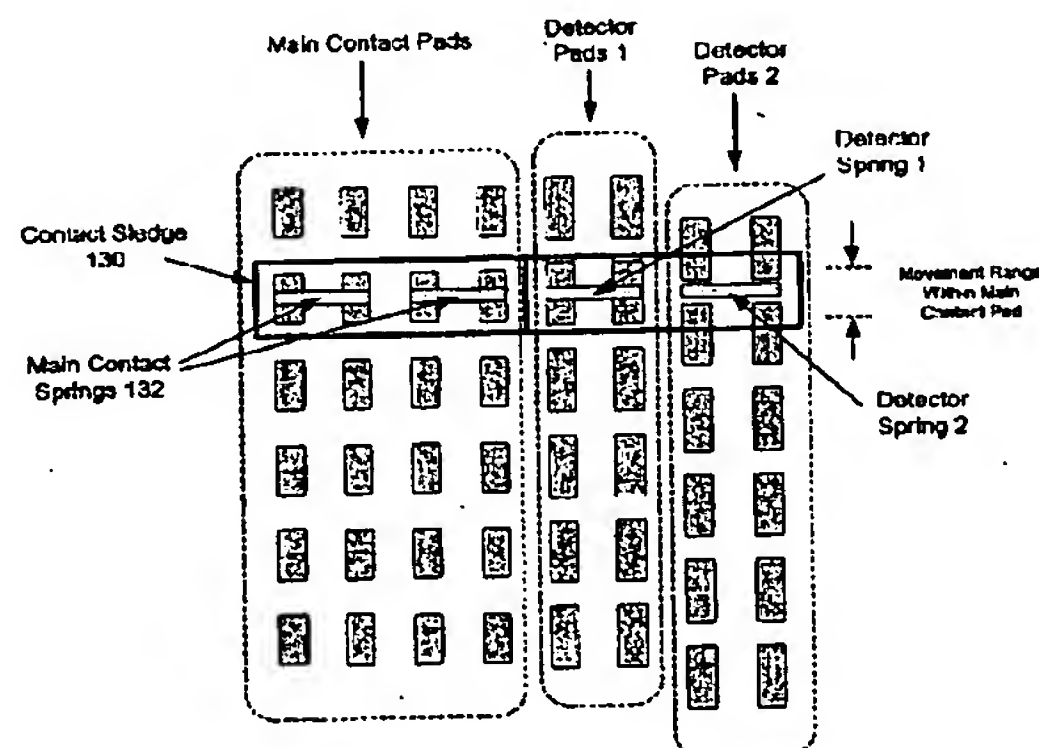
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(54) Title: DRIVE AND POSITIONING METHOD AND SYSTEM FOR AUTOMATED SWITCH MATRIX



(57) Abstract: A method and system for automating a switch matrix board for cross-connecting any line in a set of input lines to any line in a set of output lines, to be used e.g. in automating cross-connects for line pairs in a central office main distribution frame (MDF) of a telecommunication network. The switch matrix (100) comprises a plurality of contact sledges (130) driven by a frame (MDF) of a telecommunication network. The switch matrix (100) comprises a plurality of contact sledges (130) driven by a plurality of sledge positioning screws (120) that slidably engage a plurality of main contact pads (110) to cross-connect the lines. In an embodiment of the invention, two electric motors cooperate to position a lateral drive gear (158) to engage and rotate a selected sledge positioning screw (120), which moves the contact sledge. In another embodiment, a single electric motor operates together with a magnetic clutch assembly (180) to position the lateral drive gear to rotate the sledge positioning screw (120). A controller unit is connected to a position detection system and to the motor's to accurately position the contact sledge (130) on the switch matrix board.